

IN THE CLAIMS:

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~striketrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

1. (currently amended) A software processing apparatus which performs a prescribed program processing, comprising:

an operating environment determining unit which determines whether an operating environment requires power saving or not; and

a switching processing unit which performs a process of heavy load ~~for a CPU in a first environment which does not require power saving and performs a process of light load for said CPU in a second environment requiring power saving; and an automatic CPU clock adjusting unit which causes a decrease in a CPU clock to the lowest level necessary in response to a~~ throughout required to said CPU which causes said program processing to be performed as it is in a first environment which operates by an external power supply and does not require power saving and performs a process of light load in which said program processing is simplified in a second environment operating by a battery and requiring power saving, and

wherein said switching processing unit performs an animation for all images in an environment operating by said external power supply, in the case of an animation in which said program processing sequentially and repeatedly draws a plurality of images, and displays only one prescribed image in the animation in an environment operating by a battery.

2. (canceled)

3. (canceled)

4. (canceled)

5. (canceled)

6. (canceled)

7. (currently amended) An apparatus according to claim 1, further comprising a setting unit ~~of~~ setting the switching between said process of heavy load and said process of light load to be valid or invalid.

8. (original) An apparatus according to claim 1, wherein said process of heavy load and said process of light load are performed by a processor, and said processor changes an operation clock frequency in accordance with load of a process.

9. (canceled)

10. (currently amended) A software processing method which performs a prescribed program processing, comprising:

determining whether an environment requires power saving or not;

~~performing a process of heavy load for a CPU in a first environment which does not require power saving and performing a process of light load in a second environment requiring power saving; and automatically adjusting a CPU clock in which the CPU clock is lowered to the lowest level necessary in response to a throughput that said CPU is required to give~~
which causes said program processing to be performed as it is in a first environment which operates by an external power supply and does not require power saving and performing a process of light load in which said program processing is simplified in a second environment operating by a battery and requiring power saving; and

in a case of an animation in which said program processing sequentially and repeatedly draws a plurality of images, performing animation for all the images in an environment operating by an external power supply, and displaying only the last image of animation in an environment operating by a battery.

11. (canceled)

12. (canceled)

13. (canceled)

14. (canceled)

15. (canceled)

16. (currently amended) A method according to claim 10, wherein ~~said switching step performs~~ switching between said process of heavy load and said process of light load is performed on the basis of valid/invalid setting information.

17. (original) A method according to claim 10, wherein said process of heavy load and said process of light load are performed by a processor, and said processor changes an operation clock frequency in accordance with load of a process.

18. (canceled)

19. (currently amended)) A recording medium on which a program to be executed by a computer is ~~recorded~~ to perform a prescribed program processing,

wherein said program ~~includes~~ causes execution of:

an operating environment determining operation determining whether an operating environment requires power saving or not;

~~a switching operation performing a process of heavy load for a CPU in a first environment which does not require power saving and performing a process of high load in a second environment requiring power saving; and an operation done in response to the throughput that said CPU is required to give.~~ a switching processing operation which performs a processing of high load which causes performance of said program processing as it is in a first environment which operates by an external power supply and does not require power saving, and performances of a processing of low load which simplifies said program processing in a second environment operating by a battery and requiring power saving; and

wherein said switching processing operation performs, in the case of an animation which draws sequentially and repeatedly a plurality of images in said program processing, in an environment which operates by the external power supply, and displays only the last image of animation in an environment operating by the battery.

20. (canceled)

21. (canceled)

22. (canceled)

23. (canceled)

24. (canceled)

25. (currently amended) A recording medium according to claim 19, wherein said ~~switching step operation~~ performs switching between said process of heavy load and said process of light load on the basis of setting valid/invalid information.

26. (original) A recording medium according to claim 19, wherein said process of heavy load and said process of light load are performed by a processor of said computer, and said processor changes an operation clock frequency in accordance with load of a process.

27. (original) A recording medium according to claim 19, wherein said program is

commonly used by other program and performs switching between said process of heavy load and said process of light load in response to a notification from the other program.

28. (original) A recording medium according to claim 27, wherein said program determines the contents of said process of heavy load and the contents of said process of light load in accordance with the contents included in the notification from said other program.

29. (canceled)

30. (currently amended) A recording medium on which a program to be executed by a computer is recorded, wherein said program includes:

an operating environment determining operation determining whether an operating environment requires power saving or not; and

a switching operation performing a process of heavy load for a CPU in a first environment which does not require power saving and performing a process of ~~light~~^{high} load in a second environment requiring power saving; ~~and an automatic CPU clock adjusting operation automatically adjusting a CPU clock in which the CPU clock is lowered to the lowest level necessary in response to a throughput that said CPU is required to give, and~~

wherein the light load process performed is responsive to the heavy load process where for an animation heavy load process one of light processing a last image, thinning images or producing images of a lower resolution is performed, for a floating point arithmetic heavy load process a light load process ignoring fractional numbers parts is performed, and for a graphical user interface heavy load process a light load process of a dialog display is performed.

31. (currently amended) A method of processing, comprising:

determining whether a CPU performing processing is operating in a battery mode; and

automatically reducing an operation load on the CPU when the processing is operating in the battery mode; ~~and automatically reducing a CPU clock speed when the processing is operating in the battery mode, and~~

wherein a light load process performed is responsive to a heavy load process during the reducing where for an animation heavy load process one of light processing a last image, thinning images or producing images of a lower resolution is performed, for a floating point arithmetic heavy load process a light load process ignoring fractional numbers parts is performed, and for a graphical user interface heavy load process a light load process of a dialog display is performed.

32. (currently amended) A method of processing, comprising:

determining whether a CPU performing processing is operating in a battery mode; and
automatically reducing an operation load on the CPU when the processing is operating in the battery mode; ~~and automatically reducing a CPU clock speed in correspondence to the reduced operation load when the processing is operating in the battery mode, and~~

wherein a light load process performed is responsive to operation load of a heavy load process where for an animation heavy load process one of light processing a last image, thinning images or producing images of a lower resolution is performed, for a floating point arithmetic heavy load process a light load process ignoring fractional numbers parts is performed, and for a graphical user interface heavy load process a light load process of a dialog display is performed.

33. (new) A software processing apparatus which performs a prescribed program processing, comprising:

an operating environment determining unit which determines whether an operating environment requires power saving or not; and

a switching processing unit which performs a process of heavy load which causes said program processing to be performed as it is in a first environment which operates by an external power supply and does not require power saving and performs a process of light load in which said program processing is simplified in a second environment operating by a battery and requiring power saving; and

wherein said switching processing unit performs floating-point arithmetic in an environment operating by an external power supply in the case where said program processing performs a floating-point arithmetic, and performs arithmetic omitting numerical figures after a decimal for fractions in an environment operating by a battery.

34. (new) A software processing apparatus which performs a prescribed program processing, comprising:

an operating environment determining unit which determines whether an operating environment requires power saving or not; and

a switching processing unit which performs a process of heavy load which causes said program processing to be performed as it is in a first environment which operates by an external power supply and does not require power saving and performs a process of light load in which said program processing is simplified in a second environment operating by a battery and requiring power saving, and

wherein, when said program processing is an animation processing, said switching processing unit performs the animation processing as it is in an environment operating by an external power supply, and performs the animation processing by thinning out images or at a lower resolution in an environment operating by a battery.

35. (new) A software processing apparatus which performs a prescribed program processing, comprising:

an operating environment determining unit which determines whether an operating environment requires power saving or not; and

a switching processing unit which performs a process of heavy load which causes said program processing to be performed as it is in a first environment which operates by an external power supply and does not require power saving and performs a process of light load in which said program processing is simplified in a second environment operating by a battery and requiring power saving; and

wherein, when said program processing displays a graphical user interface, said switching processing unit performs a graphical display of the user interface in an environment operating by an external power supply, and switches over the user interface to execution of a dialog display in an environment operating by a battery.

36. (new) A software processing method which performs a prescribed program processing, comprising:

determining whether an operating environment requires power saving or not; and

performing a processing of high load causing said program processing as it is in a first environment which operates by an external power supply and does not require power saving, and performs a processing of low load which simplifies said program processing in a second environment which operates by a battery and requires power saving, and

when said program processing performs floating-point arithmetic, performing a floating-point arithmetic in an environment operating by an external power supply, and performing arithmetic omitting numerical figures after a decimal for fractions in an environment operating by a battery.

37. (new) A software processing method which performs a prescribed program processing, comprising:

determining whether an environment requires power saving or not; and

performing a process of heavy load which causes said program processing to be performed as it is in a first environment which operates by an external power supply and does not require power saving and performing a process of light load in which said program processing is simplified in a second environment operating by a battery and requiring power saving, and

in a case where said program processing is an animation processing, performing the animation processing as it is in an environment operating by an external power supply, and performing the animation processing by thinning out images or at a lower resolution in an environment operating by a battery.

38. (new) A software processing method which performs a prescribed program processing, comprising:

determining whether an environment requires power saving or not; and

performing a process of heavy load which causes said program processing to be performed as it is in a first environment which operates by an external power supply and does not require power saving and performing a process of light load in which said program processing is simplified in a second environment operating by a battery and requiring power saving, and

when said program processing displays a graphical user interface, performing a graphical display of the user interface in an environment operating by an external power supply, and switching over the user interface to execution of a dialog display in an environment operating by a battery.

39. (new) A computer readable recording medium recording a program for causing a computer to execute a prescribed program process;

wherein said program causes execution of:

an operating environment determining step which determines whether an operating environment requires or not power saving; and

a switching processing step which performs a process of high load which performs said program process as it is in a first environment which operates by an external power supply and does not require power saving, and performs a process of low load which simplifies said program processing in a second environment operating by a battery and requiring power saving, and

wherein said switching processing step performs, when, said program processing performs a floating-point arithmetic, floating-point arithmetic in an environment operating by the external power supply, and performs arithmetic omitting numerical figures after a decimal for fractions in an environment operating by the battery.

40. (new) A computer readable recording medium recording a program for causing a computer to execute a prescribed program process;

wherein said program causes execution of

an operating environment determining step which determines whether an operating environment requires or not power saving, and

a switching processing step which performs a process of high load which performs said program process as it is in a first environment which operates by an external power supply and does not require power saving, and performs a process of low load which simplifies said program process in a second environment operating by a battery and requiring power saving; and

wherein said switching processing step, when said program process is an animation process, performs the animation process as it is in an environment operating by the external power supply, and performs the animation processing by thinning out images or at a lower resolution in. an environment operating by the battery.

41. (new) A recording medium recording a program for causing a computer to execute a prescribed program processing;

wherein said program causes execution of

an operating environment determining step which determines whether an operating environment requires or not power saving; and

a switching processing step which performs a process of high load which performs said program processing as it is in a first environment operating by an external power supply and not requiring power saving, and performs a process of low load which simplifies said program processing in a second environment operating by a battery and requiring power saving, and

wherein said switching processing step, when said program process displays a graphical user interface, performs a graphical display of the user interface in an environment operating by the external power supply, and switches over the user interface to performance of a dialog display in an environment operating by the battery.